

AIRCRAFT CHARACTERISTICS FOR AIRFIELD-HELIPORT
DESIGN AND EVALUATION

AIRCRAFT PARKING APRONS

B-1. This appendix presents parking apron data for US Army, US Air Force, and selected civil and commercial fixed-wing and rotary-wing aircraft. The data should be beneficial to planners and civil engineers in the layout and design of airfield and heliport systems. Parking apron data include aircraft dimensions, separation distances, taxilane widths, and parking plans. Jet blast clearance distances are also presented for applicable fixed-wing aircraft.

B-2. Parking data are arranged in table format for various military, civil, and commercial fixed-wing aircraft (tables B-1 to B-3) and supported by figures B-1 to B-3. Military and commercial rotary-wing aircraft parking data are presented in table B-4 and figures B-4 through B-11.

B-3. Tactical/fighter aircraft are parked at a 45 degree angle as shown in figures B-1 and B-2. This is the most economical parking method for achieving the clearance needed to dissipate temperatures and velocities of jet blast to levels that will not endanger aircraft personnel. According to AFM 86-2, safe distance is defined as the minimum clearance needed to the rear of a jet engine operating at military power to dissipate the temperature (100 F) and velocity (35 miles per hour) of jet blast that will not endanger aircraft personnel.

B-4. Tactical/fighter aircraft will be parked in rows and spaced according to the dimensions given in table B-1. The safe distance values for various aircraft are based on information provided by Air Logistic Center managers and aircraft manufacturers. Safe distance is measured from the rear of the aircraft. Jet blast relationships used to determine aircraft safe distances are presented in Appendix E. Table B-1 also presents parking plans for aircraft with a safe distance greater than 125 feet (fig B-1) and with a safe distance equal to or less than 125 feet (fig B-2). Corresponding separation distances A, B, C, and D for each aircraft are presented in table B-1 and these distances are defined on figures B-1 and B-2.

B-5. Military bomber, cargo, and special duty aircraft will be parked and spaced according to the dimensions given in table B-2. Parking separation distances for civil and commercial aircraft are given in table B-3. A typical parking apron for military, civil, and commercial aircraft is shown on figure B-3.

B-6. The following correspondence between column symbols and actual parking apron separation dimensions is employed in tables B-2 and B-3. An entry of "+" indicates data are not available.

<u>Symbol</u>	<u>Dimension</u>
A	Clear distance between nose of parked aircraft and wingtip clearance of moving aircraft taxiing on peripheral or through (length of apron) taxilanes.
B	Clear distance between rear of parked aircraft, without regard to jet/prop blast, and wingtip clearance of moving aircraft taxiing on peripheral or through (length of apron) taxilanes.
C	Taxi clear distance between parked aircraft without regard to jet/prop blast; i.e., Wingspan + A + B.
D	Clearance needed to the rear of parked aircraft, with engines operating at takeoff power, to dissipate either 100[deg] F temperatures or 35 miles per hour velocities.
E	Clear distance between wingtips of parked aircraft and moving aircraft taxiing in lanes between parked aircraft.
F	Clear distance between wingtips of parked (stationary) aircraft.

B-7. The parking separation distance (columns A, B, E, and F of tables B-2 and B-3) are US Air Force apron criteria presented in AFM 86-2. The jet/prop blast data presented in column D of tables B-2 and B-3 are based on information provided by Air Logistic Center managers and aircraft manufactures. The values in column D indicate the magnitude of jet blast which can occur to the rear of aircraft. Temperature and velocity jet blast levels are taken from fighter aircraft criteria presented in AFM 86-2. The criteria states that a minimum clearance is needed to the rear of an engine to dissipate either the temperature (100° F) or velocity (35 miles per hour) of jet blast that will not endanger aircraft personnel. Jet blast clearance criteria is not defined for non-fighter aircraft; however, from values shown in column D, the designer should be aware that certain aircraft produce jet blast of large magnitudes. Jet blast relationships are presented in Appendix E.

B-8. Commercial and military rotary-wing aircraft will be parked and spaced according to the parking plans given in table B-4.

Military aircraft designation; if applicable, is identified within parenthesis following the commercial designation.

B-9. Helicopter parking plans are based on US Army criteria presented in TM 5-803-4. Parking plans for the UH-1 (figs B-4 and B-5), UH-60 (figs B-6 and B-7), CH-47 (figs B-8 and B-9), and CH-54 (figs B-10 and B-11) were used as standards to categorize each aircraft in table B-4. Categorization of each helicopter was based according to main rotor diameter limits set by the standard aircraft (UH-1, UH-60, CH-47, and CH-54). Either type 1 or type 2 parking plans can be used to satisfy helicopter parking apron design and planning.

Table B-1. Tactical/Fighter Aircraft Parked at 45° Angle-Aircraft Dimensions, Parking Plan, and Separation Distances.

Aircraft	Aircraft		Safe Distance feet	Parking Plan Fig. No.	Aircraft			
	Wingspan feet	Length feet			A	B	C	D
A-7D	38.7	46.1	1,500	B-1	1,060	90	45	69
A-7K	38.7	48.7	1,500	B-1	1,060	90	45	69
A-10A	57.5	53.3	160	B-1	115	98	47	96
A-37B	38.3	31.8	25	B-2	--	90	31	69
F-4C	38.6	58.3	100	B-2	--	90	51	69
F-4D/E	38.4	63.0	100	B-2	--	90	51	69
F-5E	26.7	48.2	200	B-1	145	90	40	52
F-5F	26.7	51.7	200	B-1	145	90	40	52
F-15A/B/C/D/E	42.8	63.8	525	B-1	375	90	54	75
F-16A/B	32.8	49.5	525	B-1	375	90	40	61

(Continued)

Table B-1. (Concluded).

Aircraft	Aircraft Wingspan feet	Aircraft Length feet	Safe Distance feet	Parking Plan Fig. No.	A feet	B feet	C feet	D feet
F-16C/D	32.8	49.5	870	B-1	615	90	40	61
F-100	38.8	57.6	110	B-2	--	90	48	69
F-101B	39.7	66.9	175	B-1	125	90	55	71
F-104G	21.9	54.8	195	B-1	140	90	43	46
F-105D	34.9	67.5	185	B-1	135	90	54	64
F-105F/G	34.9	69.9	185	B-1	135	90	54	64
F-106A/B	38.3	70.8	190	B-1	135	90	56	69
F-111A/E	63.0	75.5	215	B-1	155	103	60	104
F-111D	63.0	75.5	350	B-1	250	103	60	104
F-111F	63.0	75.5	765	B-1	540	103	60	104
EF-111A	63.0	75.5	215	B-1	155	103	60	104
FB-111A	70.0	75.7	350	B-1	250	110	64	114
OA-37B	38.3	31.8	25	B-2	--	90	31	69
RF-4C	38.4	63.0	100	B-2	--	90	51	69

Table B-2. Military Fixed-Wing Aircraft Parking Separation
Distances.

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
B-1B	136.7	151.1	50	50	237	980	30	20
B-52G	185.0	161.9	50	50	285	80	30	20
B-52H	185.0	160.4	50	50	285	320	30	20
C-5A/B	222.7	247.8	50	50	323	1,100	30	20
C-7A	95.6	72.6	30	30	156	†	20	10
C-9A	93.3	119.3	30	30	153	380	20	10
C-12A/C/D/F	54.5	43.8	30	30	115	†	20	10
C-12J	54.5	57.8	30	30	115	†	20	10
C-17A	170.0	174.0	50	50	270	†	30	20
C-20A/B	77.8	83.1	30	30	138	†	20	10
C-21A	39.5	48.7	30	30	100	150	20	10
C-22B	108.0	133.2	30	30	168	430	20	10
C-23A	74.8	58.0	30	30	135	†	20	10
C-130B/E/H	132.6	99.5	50	50	233	1,000	30	20
AC-130A	132.6	97.8	50	50	233	1,000	30	20
AC-130H/U	132.6	99.5	50	50	233	1,000	30	20
C-135B	130.8	134.4	50	50	231	320	30	20
KC-135R	130.8	136.2	50	50	231	580	30	20
C-137B	130.8	144.5	50	50	231	320	30	20

(Continued)

Table B-2. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
C-137C	145.8	152.9	50	50	246	320	30	20
C-140A/B	54.5	60.5	30	30	115	190	20	10
C-141A	160.0	145.0	50	50	260	390	30	20
C-141B	160.0	168.3	50	50	260	390	30	20
KC-10A	165.3	181.6	50	50	265	1,560	30	20
VC-25A	195.7	231.3	50	50	296	620	30	20
E-3A/B/C	145.8	152.9	50	50	246	400	30	20
E-4A/B	195.7	231.3	50	50	296	1,200	30	20
EC-18B	145.8	152.4	50	50	246	320	30	20
EC-130E/H	132.6	99.5	50	50	233	1,000	30	20
MC-130E/H	132.6	99.5	50	50	233	1,000	30	20
WC-130E/H	132.6	108.1	50	50	233	1,000	30	20
EC-135A/G/L	130.8	136.2	50	50	231	160	30	20
EC-135C/J/Y	130.8	136.2	50	50	231	320	30	20
EC-135E	130.8	141.5	50	50	231	320	30	20
RC-135M/S/W	130.8	140.0	50	50	231	320	30	20
RC-135U	130.8	140.5	50	50	231	320	30	20
RC-135V	130.8	140.5	50	50	231	320	30	20
WC-135B	130.8	134.5	50	50	231	320	30	20
O-2A/B	38.0	29.2	30	30	98	†	20	10

(Continued)

Table B-2. (Concluded).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
OV-1B/D	48.0	43.9	30	30	108	15	20	10
OV-1C	42.0	41.1	30	30	102	15	20	10
OV-10A	41.6	40.0	30	30	102	†	20	10
RC-12D/G/ H/K	54.5	43.8	30	30	115	†	20	10
U-21J	54.5	43.8	30	30	115	†	20	10
RU-21A/H	50.9	35.5	30	30	111	†	20	10
U-21A/D/G	45.9	35.5	30	30	106	†	20	10
SR-71A	107.4	55.6	30	30	167	†	20	10
TR-1A	103.0	63.0	30	30	163	†	20	10
U-2B/C	80.0	49.6	30	30	140	†	20	10
U-8F	45.9	33.3	30	30	106	†	20	10
U-10A	39.0	30.3	30	30	99	†	20	10
U-21F	45.9	39.9	30	30	106	†	20	10
UV-18	65.0	51.8	30	30	125	†	20	10

Table B-3. Civil and Commercial Fixed-Wing Aircraft Parking
Separation Distances.

<u>Aircraft</u>	<u>Wingspan</u> <u>feet</u>	<u>Length</u> <u>feet</u>	<u>A</u> <u>feet</u>	<u>B</u> <u>feet</u>	<u>C</u> <u>feet</u>	<u>D</u> <u>feet</u>	<u>E</u> <u>feet</u>	<u>F</u> <u>feet</u>
Bellanca 7	33.4	22.7	30	30	93	†	20	10
Cessna 120/140	32.8	21.0	30	30	93	†	20	10
Cessna 170	36.0	25.0	30	30	96	†	20	10
Cessna 180/185	36.2	25.8	30	30	96	†	20	10
Cessna 190/195	36.2	27.1	30	30	96	†	20	10
Helio H-250/ H-295	39.0	31.5	30	30	99	†	20	10
Helio MST-550	41.0	39.6	30	30	101	†	20	10
Piper PA-12/ -14/-15	35.5	22.5	30	30	96	†	20	10
Piper PA-18	35.3	22.4	30	30	95	†	20	10
Piper PA-20	29.3	20.4	30	30	89	†	20	10
Silvaire 8	35.0	20.0	30	30	95	†	20	10
Taylorcraft F-21	36.0	22.2	30	30	96	†	20	10
Univair 108	33.9	25.2	30	30	94	†	20	10
Bede Aircraft BD-4	25.5	21.9	30	30	86	†	20	10
Cessna 150	32.8	23.0	30	30	93	†	20	10
Cessna 172	35.8	26.9	30	30	96	†	20	10
Cessna 177	35.5	27.0	30	30	96	†	20	10
Cessna 182	35.8	28.1	30	30	96	†	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
Cessna 206	35.8	28.0	30	30	96	†	20	10
Cessna 207	35.8	31.8	30	30	96	†	20	10
Cessna 210	36.8	28.3	30	30	97	†	20	10
Piper PA-22	29.3	20.3	30	30	89	†	20	10
Aerostar 415	30.0	20.6	30	30	90	†	20	10
Aerostar M-20	35.0	23.6	30	30	95	†	20	10
Aerostar M-22	35.0	27.0	30	30	95	†	20	10
Beechcraft 23	32.8	25.0	30	30	93	†	20	10
Beechcraft V-35B	33.5	26.4	30	30	94	†	20	10
Beechcraft F-33	32.8	25.5	30	30	93	†	20	10
Beechcraft F-33A	32.8	25.5	30	30	93	†	20	10
Ballanca 260/300	24.2	23.5	30	30	84	†	20	10
Grumman AA-1	24.5	19.3	30	30	85	†	20	10
Navion G-1	34.8	27.5	30	30	95	†	20	10
Piper PA-24	36.0	24.8	30	30	96	†	20	10
Piper PA-28-180	30.0	23.5	30	30	90	†	20	10
Piper PA-28-200	30.0	24.2	30	30	90	†	20	10
Piper PA-32	32.8	27.8	30	30	93	†	20	10
Rockwell Int. 112	35.0	27.2	30	30	95	†	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
Aerostar 600/601	34.3	34.8	30	30	94	†	20	10
Beechcraft B-55	37.8	27.0	30	30	98	†	20	10
Beechcraft E-55	37.8	29.0	30	30	98	†	20	10
Beechcraft A-60	39.3	33.8	30	30	99	†	20	10
Cessna 310	37.5	29.6	30	30	98	†	20	10
Cessna 401/402/ 421	39.8	33.8	30	30	100	†	20	10
Piper PA-23-160	37.2	27.4	30	30	97	†	20	10
Piper PA-23-250	37.0	27.6	30	30	97	†	20	10
Piper PA-30	36.0	25.2	30	30	96	†	20	10
Piper PA-31	40.7	32.7	30	30	101	†	20	10
Cessna 336/337	38.2	29.8	30	30	98	†	20	10
Rockwell Int. 500	49.5	35.1	30	30	110	†	20	10
Rockwell Int. 560/580	49.1	36.6	30	30	109	†	20	10
Beechcraft 18	49.7	35.3	30	30	110	†	20	10
Beechcraft Turbo 18	46.0	37.4	30	30	106	†	20	10
Beechcraft Volpar Turboliner	46.0	44.3	30	30	106	†	20	10
Beechcraft A-65	45.9	35.5	30	30	106	†	20	10
Beechcraft B-80	50.3	35.5	30	30	110	†	20	10
Beechcraft A-90	50.3	36.5	30	30	110	†	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
Beechcraft A-100	45.9	39.9	30	30	106	↑	20	10
Beechcraft 99A	45.9	44.6	30	30	106	↑	20	10
Swearingen Merlin IIB	45.9	40.1	30	30	106	↑	20	10
Swearingen Merlin III	46.3	42.2	30	30	106	↑	20	10
Swearingen Merlin IV	46.3	59.4	30	30	106	↑	20	10
Swearingen Metro	46.3	59.4	30	30	106	↑	20	10
DeHavilland Canada DHC-6	65.0	51.8	30	30	125	↑	20	10
Hawker Siddeley Dove	57.0	39.3	30	30	117	↑	20	10
Mitsubishi MU-2	39.2	39.5	30	30	99	↑	20	10
Short Brothers SC.7	64.9	40.1	30	30	125	↑	20	10
Short Brothers SC.7-3M	64.9	40.1	30	30	125	↑	20	10
Short Brothers 330	74.7	58.0	30	30	135	↑	20	10
Short Brothers 330-200	74.7	58.0	30	30	135	↑	20	10
Short Brothers 360	74.8	70.8	30	30	135	↑	20	10
Convair 240	91.8	74.7	30	30	152	↑	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
Convair 340	105.3	79.2	30	30	165	†	20	10
Convair 440	105.3	81.5	30	30	165	†	20	10
Convair 580	105.3	81.5	30	30	165	†	20	10
Convair 600	91.8	74.7	30	30	152	†	20	10
Convair 640	105.3	81.5	30	30	165	†	20	10
Douglas DC-3	95.0	64.5	30	30	155	†	20	10
Fairchild F-27	95.2	77.2	30	30	155	†	20	10
Fairchild FH-227	95.2	83.7	30	30	155	†	20	10
Grunman Gulfstream I	78.3	63.8	30	30	138	†	20	10
Martin 404	93.3	74.6	30	30	153	†	20	10
Aerospatiale Nord 262	71.8	63.3	30	30	132	†	20	10
Hawker Siddeley Heron	71.5	48.5	30	30	132	†	20	10
Hawker Siddeley HS-748	98.5	67.0	30	30	159	†	20	10
Nihon/N.A.M.C. YS-11A	105.0	86.3	30	30	165	†	20	10
Douglas DC-4	117.5	93.9	50	50	218	†	30	20
Douglas DC-6	117.5	105.6	50	50	218	†	30	20
Douglas DC-7	127.5	112.3	50	50	228	†	30	20
Lockheed L-188	99.0	104.6	30	30	159	†	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
Lockheed L-382 (L-100-20)	132.6	106.1	50	50	233	1,000	30	20
Lockheed L-382 (L-100-30)	132.6	112.8	50	50	233	1,000	30	20
Lockheed 749A	123.0	95.2	50	50	223	†	30	20
Lockheed 1049	123.0	113.6	50	50	223	†	30	20
Lockheed 1649A	150.0	116.2	50	50	250	†	30	20
B.A.C./Vickers 745	93.8	81.8	30	30	154	†	20	10
B.A.C./Vickers 810	93.8	85.7	30	30	154	†	20	10
Cessna Citation	43.8	44.1	30	30	104	†	20	10
Gates Learjet 24	35.6	43.3	30	30	96	100	20	10
Gates Learjet 25	35.6	47.6	30	30	96	100	20	10
Gates Learjet 35/36	38.1	48.7	30	30	98	160	20	10
Grumman Gulfstream II	68.8	79.9	30	30	129	320	20	10
Lockheed 1329	54.4	60.4	30	30	115	190	20	10
Rockwell Int. NA-265-40	44.4	43.8	30	30	104	190	20	10
Rockwell Int. NA-265-60	44.4	48.3	30	30	104	190	20	10
Rockwell Int. NA-265-75A	44.5	47.2	30	30	105	140	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan</u> <u>feet</u>	<u>Length</u> <u>feet</u>	<u>A</u> <u>feet</u>	<u>B</u> <u>feet</u>	<u>C</u> <u>feet</u>	<u>D</u> <u>feet</u>	<u>E</u> <u>feet</u>	<u>F</u> <u>feet</u>
Avions Marcel Dassault Mystere 20	53.5	56.3	30	30	114	140	20	10
Fokker F-28	77.3	80.6	30	30	137	†	20	10
Hamburger Flugzeugbau HFB-320	47.5	54.5	30	30	108	100	20	10
Hawker Siddeley HS-125	47.0	47.4	30	30	107	†	20	10
Israel Aircraft 1121	43.3	50.4	30	30	103	100	20	10
Israel Aircraft 1123	43.3	52.3	30	30	103	†	20	10
Boeing 707-120B	130.8	145.1	50	50	231	550	30	20
Boeing 707-320/-420	142.4	152.9	50	50	242	820	30	20
Boeing 707-320B,C	145.8	152.9	50	50	246	550	30	20
Boeing 720	130.8	136.2	50	50	231	530	30	20
Boeing 720B	130.8	136.8	50	50	231	500	30	20
Boeing 727-100	108.0	133.2	30	30	168	420	20	10
Boeing 727-100C	108.0	133.2	30	30	168	420	20	10
Boeing 727-200	108.0	153.2	30	30	168	420	20	10
Boeing 737-100	93.0	94.0	30	30	153	380	20	10
Boeing 737-200	93.0	100.2	30	30	153	400	20	10
Boeing 737-300	94.8	109.6	30	30	155	600	20	10
Boeing 737-400	94.8	119.6	30	30	155	600	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan feet</u>	<u>Length feet</u>	<u>A feet</u>	<u>B feet</u>	<u>C feet</u>	<u>D feet</u>	<u>E feet</u>	<u>F feet</u>
Boeing 747-100B/ -200B,C/-300 Pass	195.7	231.8	50	50	296	1,200	30	20
Boeing 747-200C/ -200F Cargo	195.7	231.8	50	50	296	1,200	30	20
Boeing 747-400	211.0	231.8	50	50	311	1,560	30	20
Boeing 747SP	195.7	184.8	50	50	296	1,230	30	20
Boeing 757-200	124.8	155.3	50	50	225	1,600	30	20
Boeing 767-200/ -200ER with PW-JT9D- 7R4E Engines	156.1	159.2	50	50	256	1,300	30	20
Boeing 767-300 with PW-JT9D-7R4E Engines	156.1	180.3	50	50	256	1,300	30	20
Boeing 767-200ER with GE-CF6-80A2 Engines	156.1	159.2	50	50	256	1,200	30	20
Boeing 767-300 with GE-CF6-80A2 Engines	156.1	180.3	50	50	256	1,200	30	20
Boeing 767-300ER	156.1	180.3	50	50	256	1,650	30	20
General Dynamics/ Convair 880	120.0	129.3	50	50	220	120	30	20
General Dynamics/ Convair 990	120.0	139.8	50	50	220	50	30	20
Lockheed L-1011-1	155.3	177.7	50	50	255	1,300	30	20
Lockheed L-1011-100	155.3	177.7	50	50	255	1,300	30	20
Lockheed L-1011-200	155.3	177.7	50	50	255	1,450	30	20
Lockheed L-1011-500	155.3	164.2	50	50	255	1,450	30	20

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan</u> <u>feet</u>	<u>Length</u> <u>feet</u>	<u>A</u> <u>feet</u>	<u>B</u> <u>feet</u>	<u>C</u> <u>feet</u>	<u>D</u> <u>feet</u>	<u>E</u> <u>feet</u>	<u>F</u> <u>feet</u>
Lockheed L-1011-500 Ex. Wg.	164.3	164.2	50	50	264	1,450	30	20
McDonnell Douglas DC-8-43/-55/-55F	142.4	150.7	50	50	242	480	30	20
McDonnell Douglas DC-8-61/-61F	142.4	187.4	50	50	242	480	30	20
McDonnell Douglas DC-8-62/-62F	148.4	157.5	50	50	248	480	30	20
McDonnell Douglas DC-8-63/-63F	148.4	187.4	50	50	248	480	30	20
McDonnell Douglas DC-8-71/-71F	142.4	187.4	50	50	242	750	30	20
McDonnell Douglas DC-8-72/-72F	148.4	157.5	50	50	248	750	30	20
McDonnell Douglas DC-8-73/-73F	148.4	187.4	50	50	248	750	30	20
McDonnell Douglas DC-9-15/-15F	89.4	104.4	30	30	149	600	20	10
McDonnell Douglas DC-9-21	93.3	104.4	30	30	153	600	20	10
McDonnell Douglas DC-9-32/-33F	93.3	119.3	30	30	153	600	20	10
McDonnell Douglas DC-9-41	93.3	125.6	30	30	153	600	20	10
McDonnell Douglas DC-9-51	93.3	133.6	30	30	153	600	20	10
McDonnell Douglas MD-81/-82/-83	107.8	147	30	30	168	800	20	10

(Continued)

Table B-3. (Continued).

<u>Aircraft</u>	<u>Wingspan</u> <u>feet</u>	<u>Length</u> <u>feet</u>	<u>A</u> <u>feet</u>	<u>B</u> <u>feet</u>	<u>C</u> <u>feet</u>	<u>D</u> <u>feet</u>	<u>E</u> <u>feet</u>	<u>F</u> <u>feet</u>
McDonnell Douglas MD-87	107.8	130.4	30	30	168	800	20	10
McDonnell Douglas MD-88	107.8	147.8	30	30	168	800	20	10
McDonnell Douglas DC-10-10	155.3	182.3	50	50	255	1,200	30	20
McDonnell Douglas DC-10-30	165.3	181.6	50	50	265	1,400	30	20
McDonnell Douglas DC-10-40	165.3	182.3	50	50	265	1,600	30	20
Aerospatiale/Sud- Aviation SE-210	112.5	105.0	50	50	213	†	30	20
B.A.C. One-Eleven Model 200	88.5	93.5	30	30	149	†	20	10
B.A.C. One-Eleven Model 400	88.5	93.5	30	30	149	240	20	10
B.A.C. One-Eleven Model 500	93.5	107.3	30	30	154	360	20	10
B.A.C./Vickers VC-10-1100	146.2	158.8	50	50	246	†	30	20
B.A.C./Vickers VC-10-1150	146.2	171.7	50	50	246	†	30	20
Ilyushin IL-62	141.8	174.3	50	50	242	†	30	20
Airbus A300B2	147.1	175.5	50	50	247	†	30	20
Airbus A300B4	147.1	175.5	50	50	247	†	30	20
Airbus A300-600	147.1	177.5	50	50	247	†	30	20

(Continued)

Table B-3. (Concluded).

<u>Aircraft</u>	<u>Wingspan</u> <u>feet</u>	<u>Length</u> <u>feet</u>	<u>A</u> <u>feet</u>	<u>B</u> <u>feet</u>	<u>C</u> <u>feet</u>	<u>D</u> <u>feet</u>	<u>E</u> <u>feet</u>	<u>F</u> <u>feet</u>
Airbus A310-300	144.1	153.2	50	50	244	†	30	20
Airbus A320	111.3	123.3	50	50	211	†	30	20
B.A.C./SNIAS Concorde	83.8	205.4	30	30	144	580	20	10
British Aerospace 146-100	86.4	85.8	30	30	146	†	20	10
British Aerospace 146-200	86.4	93.7	30	30	146	†	20	10
British Aerospace 146-300	86.4	104.2	30	30	146	†	20	10

Table B-4. Rotary-Wing Aircraft Parking Plans.

<u>Aircraft</u>	<u>Main Rotor Diameter feet</u>	<u>Aircraft Length feet</u>	<u>Parking Plan</u>	
			<u>Type 1 Fig. No.</u>	<u>Type 2 Fig. No.</u>
Aerospatiale 315B	36.2	42.4	B-4	B-5
Aerospatiale 330J	49.5	59.8	B-6	B-7
Aerospatiale 332C/L	51.2	61.4	B-6	B-7
Aerospatiale 341	34.5	39.3	B-4	B-5
Aerospatiale 350B/D	35.1	42.6	B-4	B-5
Aerospatiale 355E/F/F1	35.1	42.6	B-4	B-5
Aerospatiale 360C	37.7	43.3	B-4	B-5
Aerospatiale 365C	38.3	43.7	B-4	B-5
Aerospatiale 365N	39.1	44.2	B-4	B-5
Agusta 109A and 109A MKII	25.6	42.8	B-4	B-5
Bell 47G-3B (OH-13 & TH-13T)	37.1	43.3	B-4	B-5
Bell 47G-5A	37.1	43.6	B-4	B-5
Bell 204 (UH-1E/C/M)	44.0	53.0	B-4	B-5
Bell 205 (UH-1D/H)	48.0	57.1	B-4	B-5
Bell 205A-1	48.0	57.1	B-4	B-5
Bell 206A (OH-58A/C)	35.4	41.0	B-4	B-5
Bell 206B	33.3	39.2	B-4	B-5
Bell 206L-3	37.0	42.5	B-4	B-5
Bell 209 (AH-1G)	44.0	52.9	B-4	B-5

(Continued)

Table B-4. (Continued).

<u>Aircraft</u>	<u>Main Rotor Diameter feet</u>	<u>Aircraft Length feet</u>	<u>Parking Plan</u>	
			<u>Type 1</u> <u>Fig. No.</u>	<u>Type 2</u> <u>Fig. No.</u>
Bell 209 (AH-1S PROD.)	44.0	53.0	B-4	B-5
Bell 209 (AH-1S ECAS)	44.0	53.1	B-4	B-5
Bell 209 (AH-1S MOD.)	44.0	53.1	B-4	B-5
Bell 212 (UH-1N)	48.0	53.3	B-4	B-5
Bell 212	48.0	53.3	B-4	B-5
Bell 214B	50.0	60.4	B-6	B-7
Bell 214ST	52.0	62.2	B-6	B-7
Bell 222	39.8	47.5	B-4	B-5
Bell 222B	42.0	50.3	B-4	B-5
Bell 222UT	42.0	50.3	B-4	B-5
Bell 406 AHIP (OH-58D)	35.0	42.2	B-4	B-5
Bell 412	46.0	56.2	B-4	B-5
Boeing 107-II	50.0	83.3	B-8	B-9
Boeing 114 (CH-47B/C/D)	60.0	99.0	B-8	B-9
Boeing 234 LR/ER/UT/MLR	60.0	99.0	B-8	B-9
Boeing 360	49.7	83.3	B-8	B-9
E.H. Industries 101	61.0	75.3	B-10	B-11
Enstrom 280C, 280F, 280FX, F28C-2, F28F	32.0	29.3	B-4	B-5
Hynes H-2/with skid gear	23.8	28.0	B-4	B-5

(Continued)

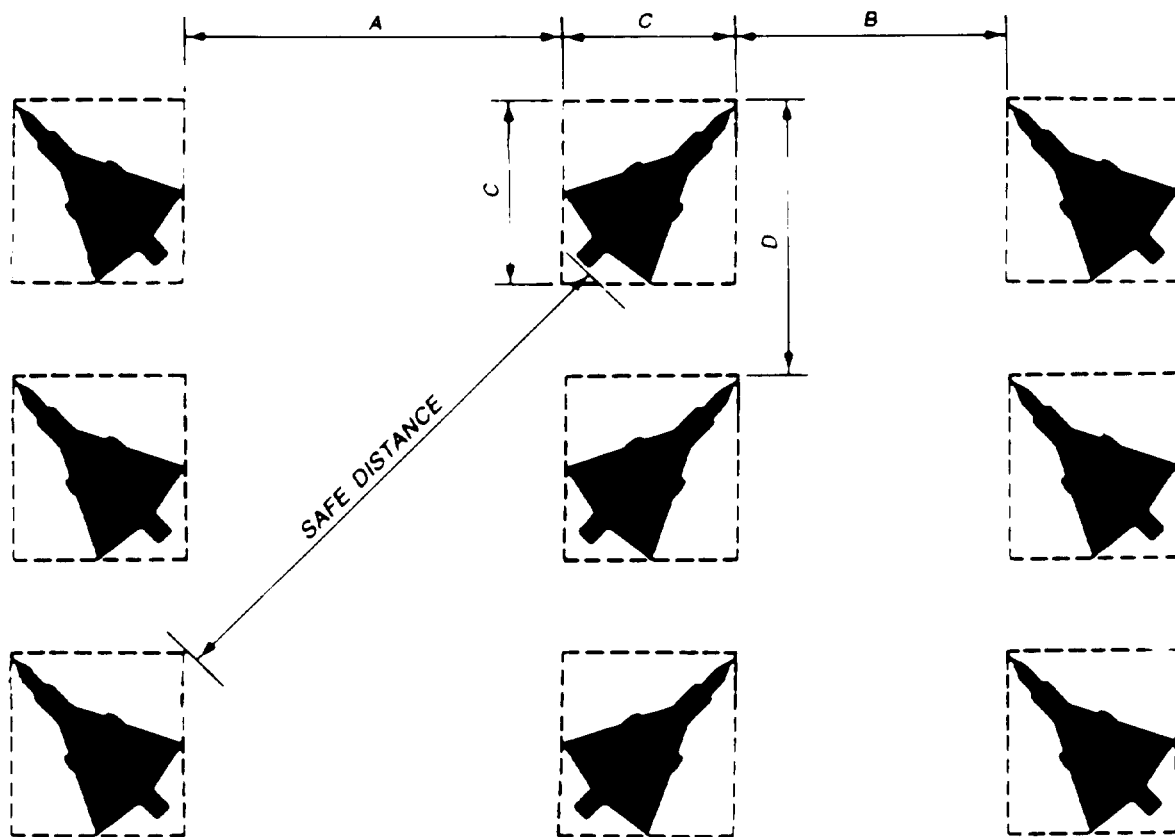
Table B-4. (Continued).

<u>Aircraft</u>	<u>Main Rotor Diameter feet</u>	<u>Aircraft Length feet</u>	<u>Parking Plan</u>	
			<u>Type 1 Fig. No.</u>	<u>Type 2 Fig. No.</u>
Hynes H-2/with wheel gear	23.8	28.0	B-4	B-5
Hynes H-5/with skid gear	28.5	32.9	B-4	B-5
Hynes H-5/with wheel gear	28.5	32.9	B-4	B-5
MBB BO 105 CB/CBS/LS	32.3	38.9	B-4	B-5
MBB/Kawasaki BK 117	36.1	42.7	B-4	B-5
McDonnell Douglas 77 (AH-64A)	48.0	58.3	B-6	B-7
McDonnell Douglas 500 (OH-6A)	26.3	30.3	B-4	B-5
McDonnell Douglas 500D	26.4	30.8	B-4	B-5
McDonnell Douglas 530F	27.4	32.1	B-4	B-5
Robinson R22	25.2	28.8	B-4	B-5
Rogerson Hiller RH-1100	35.4	39.8	B-4	B-5
Rogerson Hiller UH-12E/ E4/ET/E4T	35.4	40.8	B-4	B-5
Schweizer 269A (TH-55A)	27.4	28.3	B-4	B-5
Schweizer 300C	26.8	30.8	B-4	B-5
Sikorsky S-58T	56.0	65.8	B-8	B-9
Sikorsky S-61N	62.0	72.8	B-10	B-11
Sikorsky S-62	53.0	62.3	B-6	B-7
Sikorsky S-64 (CH-54A)	72.0	88.5	B-10	B-11

(Continued)

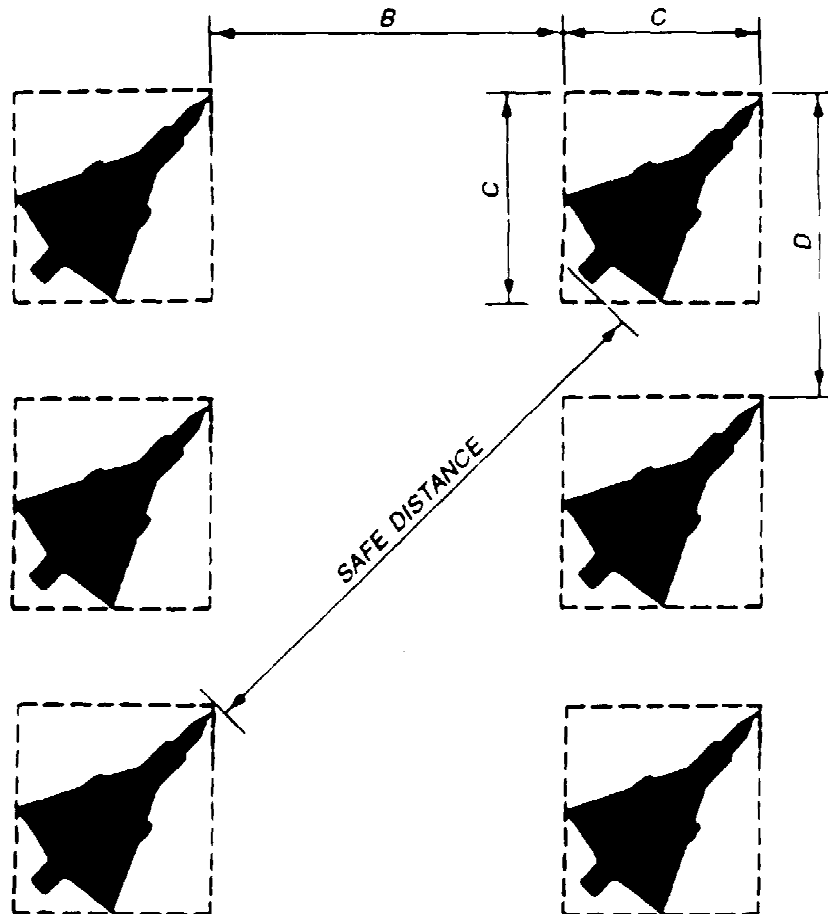
Table B-4. (Concluded).

<u>Aircraft</u>	<u>Main Rotor Diameter feet</u>	<u>Aircraft Length feet</u>	<u>Parking Plan</u>	
			<u>Type 1 Fig. No.</u>	<u>Type 2 Fig. No.</u>
Sikorsky S-65A (CH-53C & HH-53C)	72.3	88.3	B-10	B-11
Sikorsky S-70 (HH-60A & UH-60A)	53.7	64.8	B-6	B-7
Sikorsky S-70C	53.7	64.8	B-6	B-7
Sikorsky S-76A/B	44.0	52.5	B-4	B-5
Westland 30-100-60	43.7	52.1	B-4	B-5
Westland 30-200	43.7	52.1	B-4	B-5
Westland 30-300	42.5	52.1	B-4	B-5



- A = SAFE DISTANCE (0.707)
B = 90 FEET OR WINGSPAN OF AIRCRAFT + 40 FEET
(WHICHEVER IS GREATER)
C = BLOCK DIMENSION OF AIRCRAFT
D = 1.414 (WINGSPAN + 10 FEET)

Figure B-1. Parking Plan for Aircraft with Safe Distance
Greater Than 125 Feet



**B = 90 FEET OR WINGSPAN OF AIRCRAFT + 40 FEET
(WHICHEVER IS GREATER)**

C = BLOCK DIMENSION OF AIRCRAFT

D = 1.414 (WINGSPAN + 10 FEET)

Figure B-2. Parking Plan for Aircraft with Safe Distance
Equal To or Less Than 125 Feet

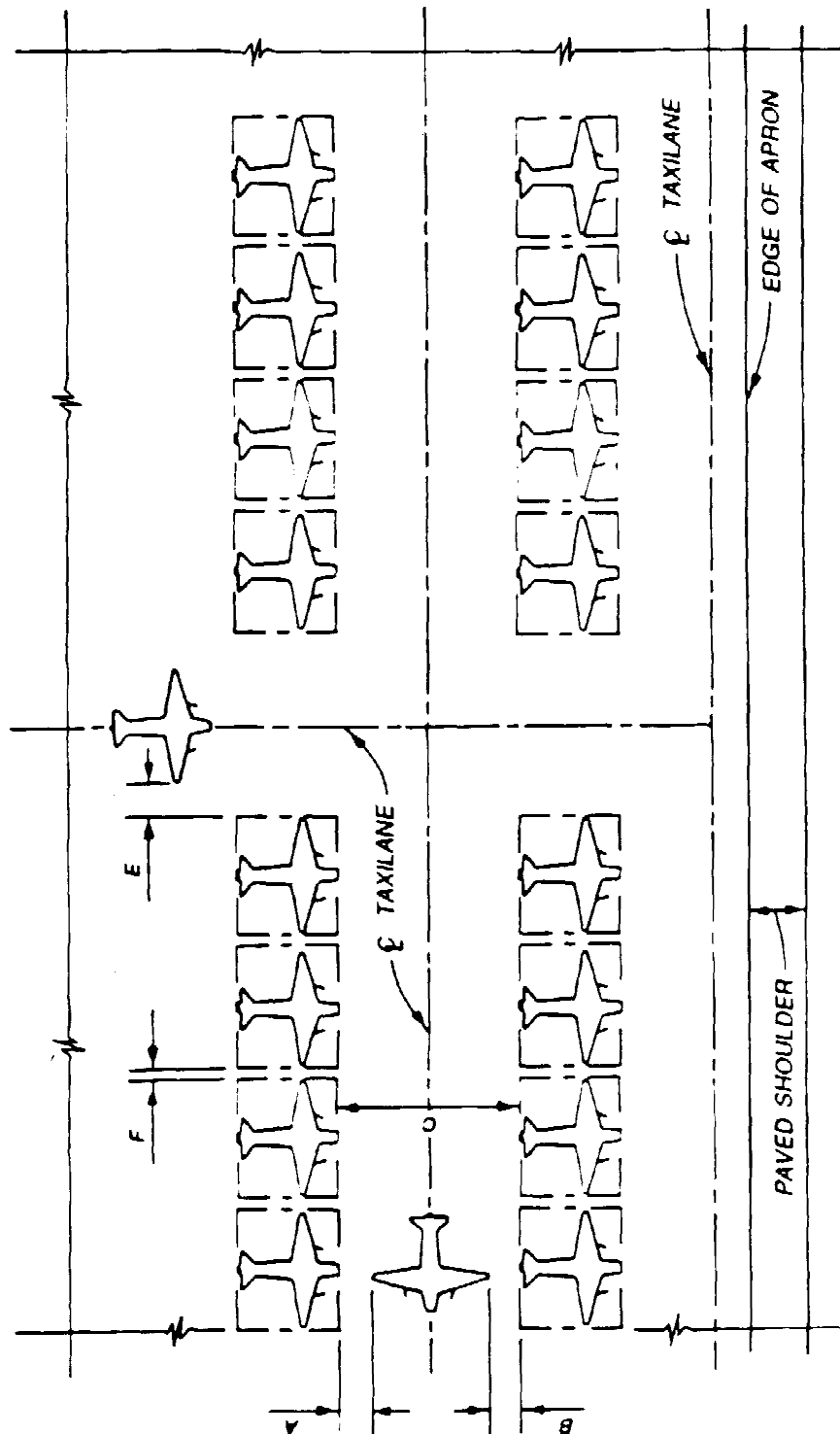


Figure B-3. Fixed-Wing Aircraft Parking Plan

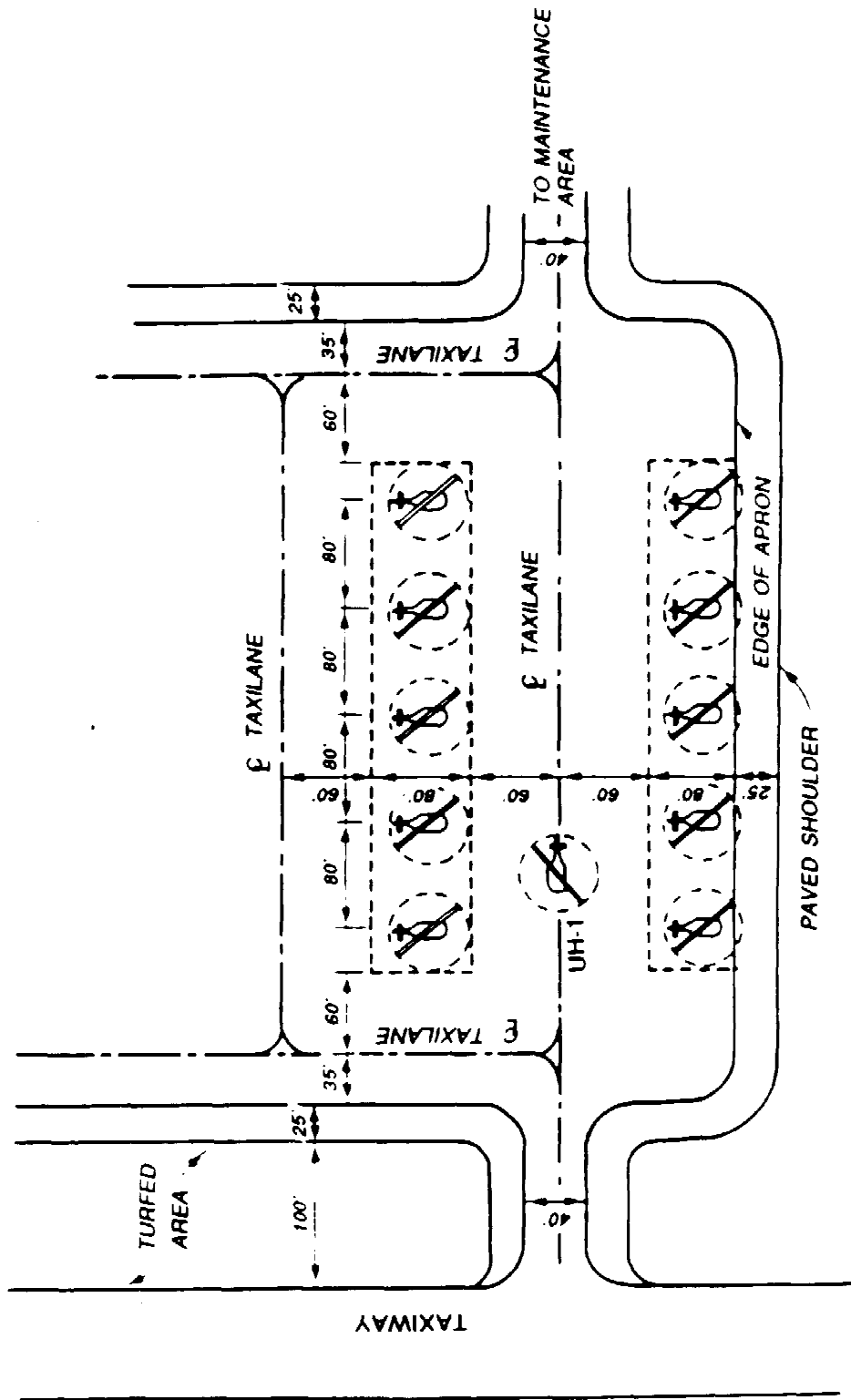


Figure B-4. UH-1 Parking Plan, Type 1 (Single Lane)

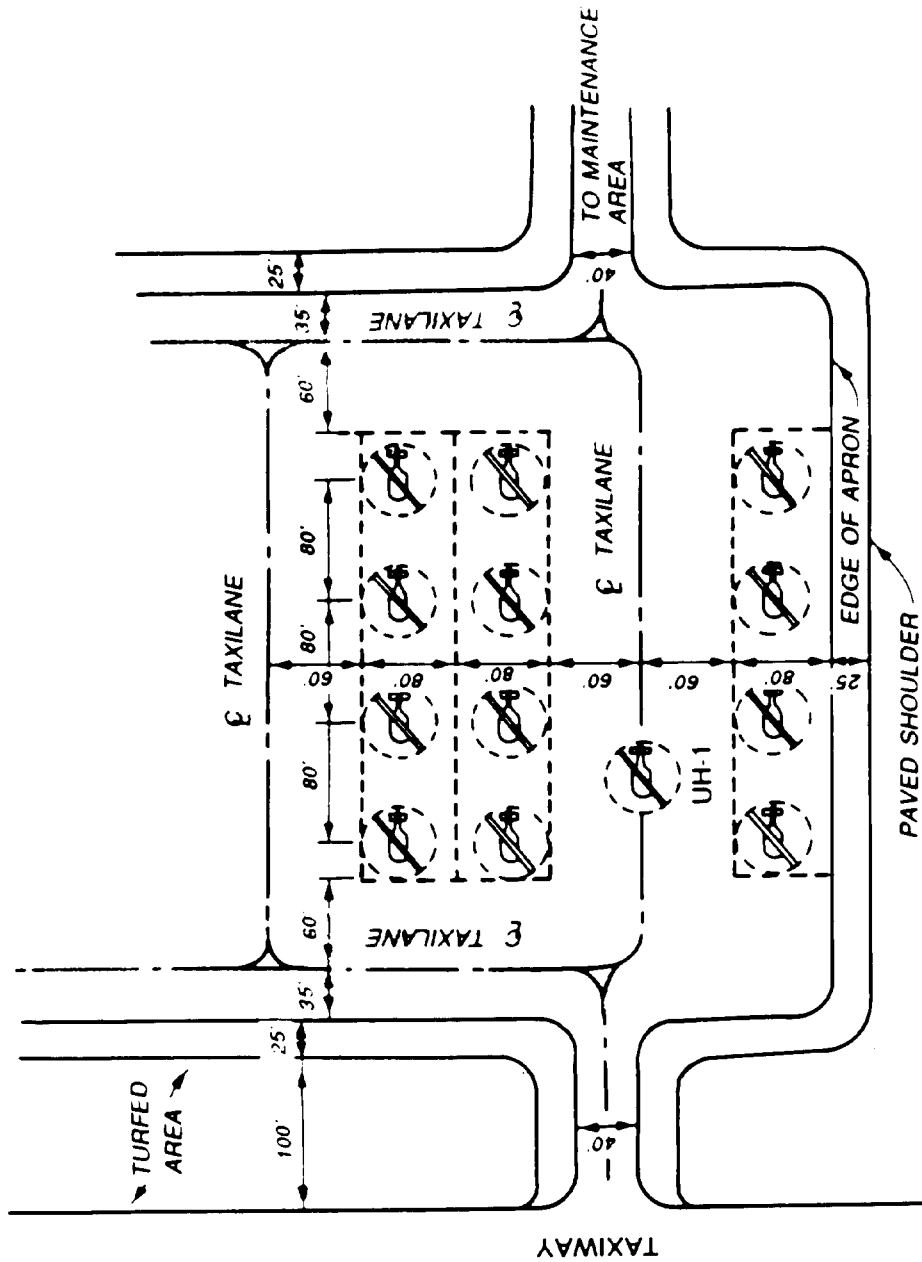


Figure B-5. UH-1 Parking Plan, Type 2 (Double Parallel)

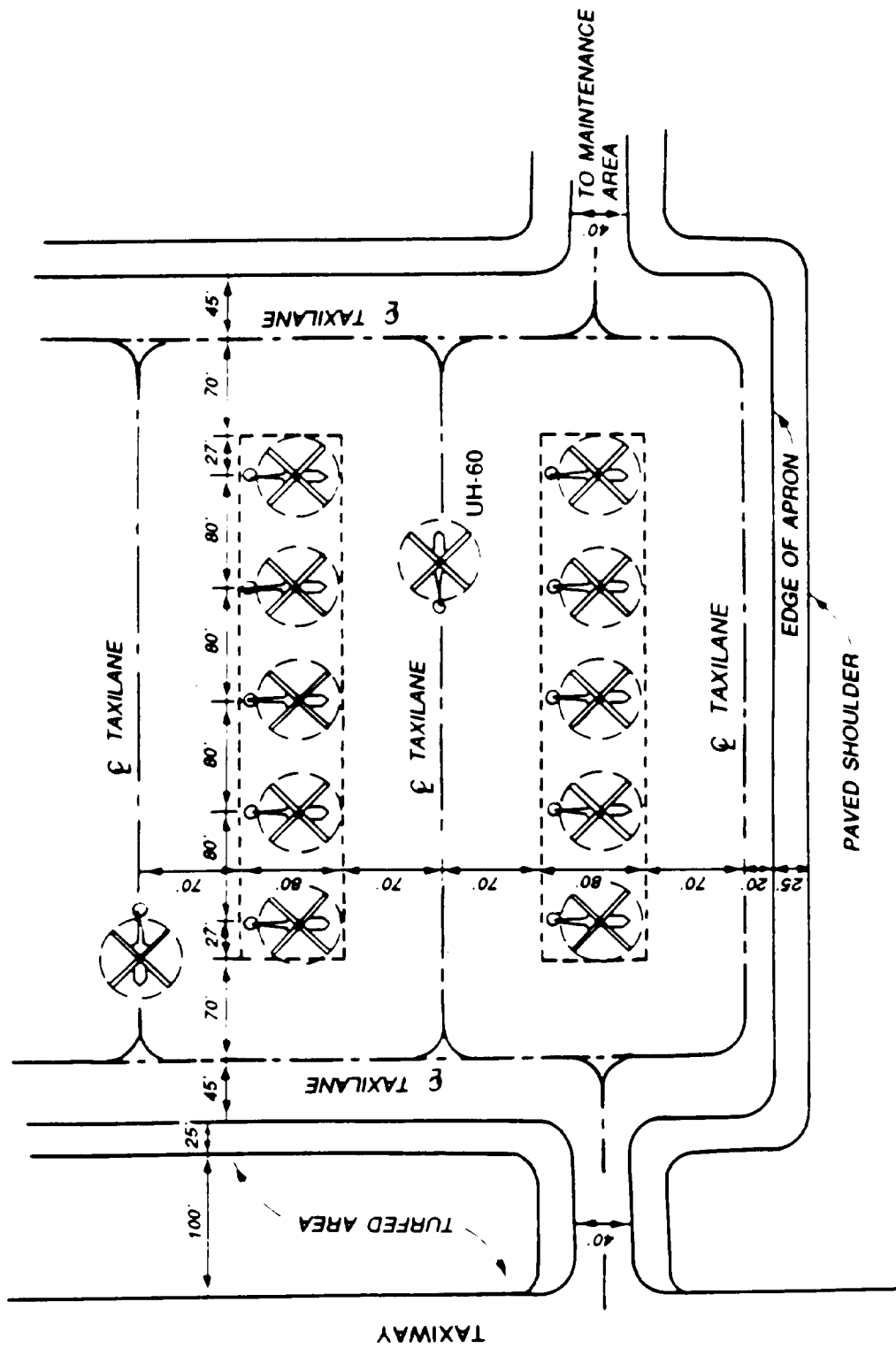


Figure B-6. UH-60 Parking Plan, Type 1 (Single Lane)

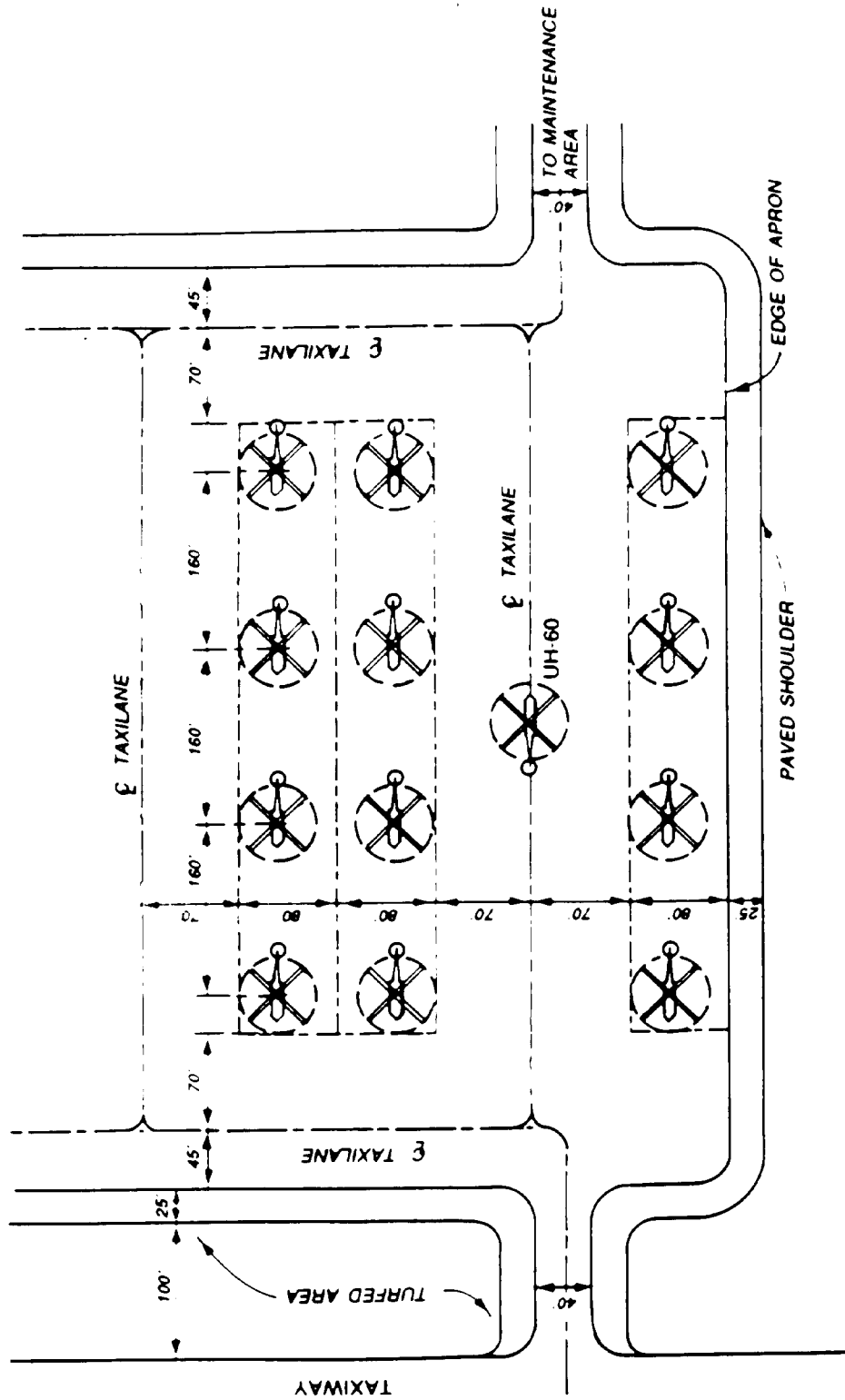


Figure B-7. UH-60 Parking Plan, Type 2 (Double Parallel)

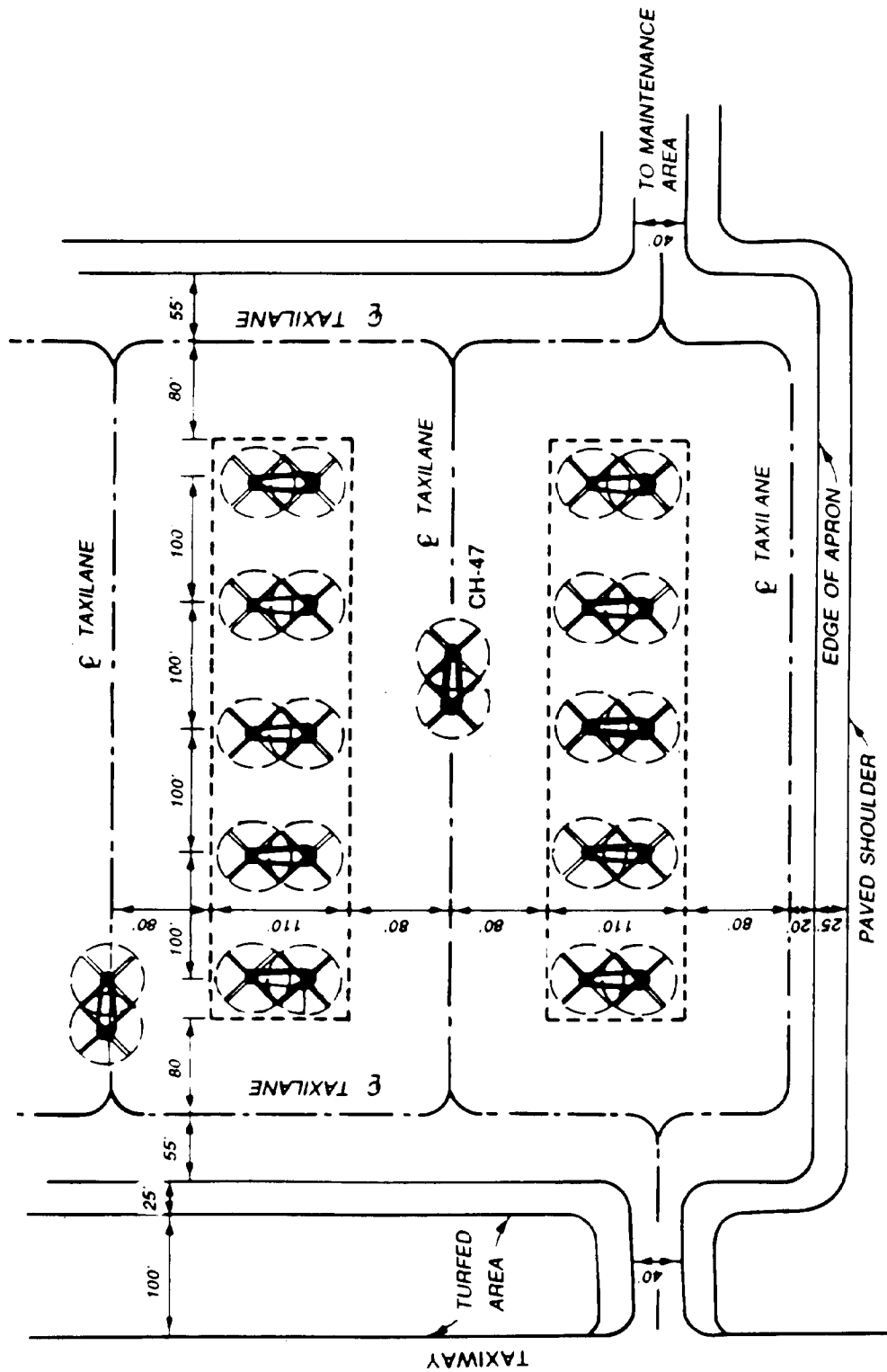


Figure B-8. CH-47 Parking Plan, Type 1 (Single Lane)

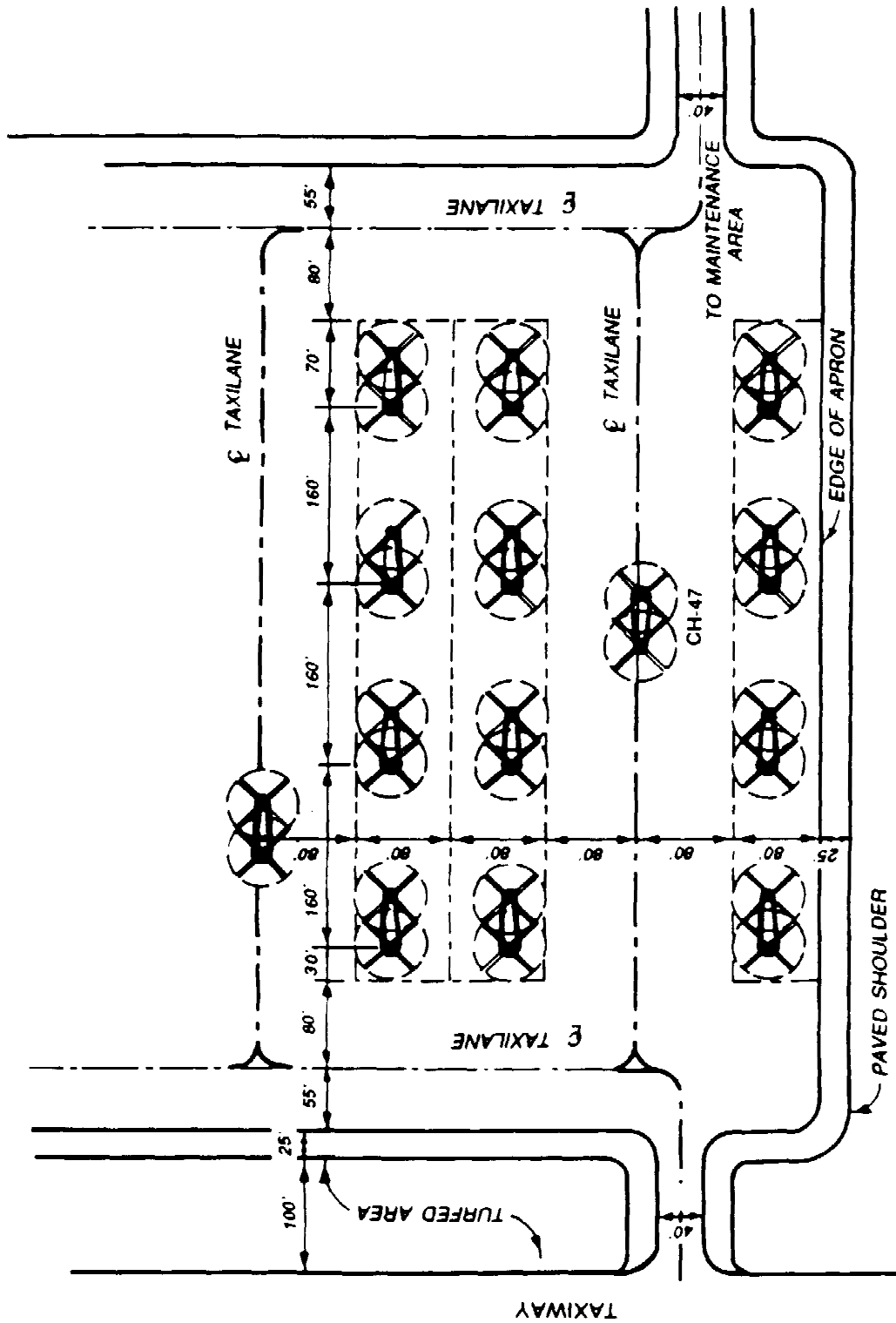


Figure B-9. CH-47 Parking Plan, Type 2 (Double Parallel)

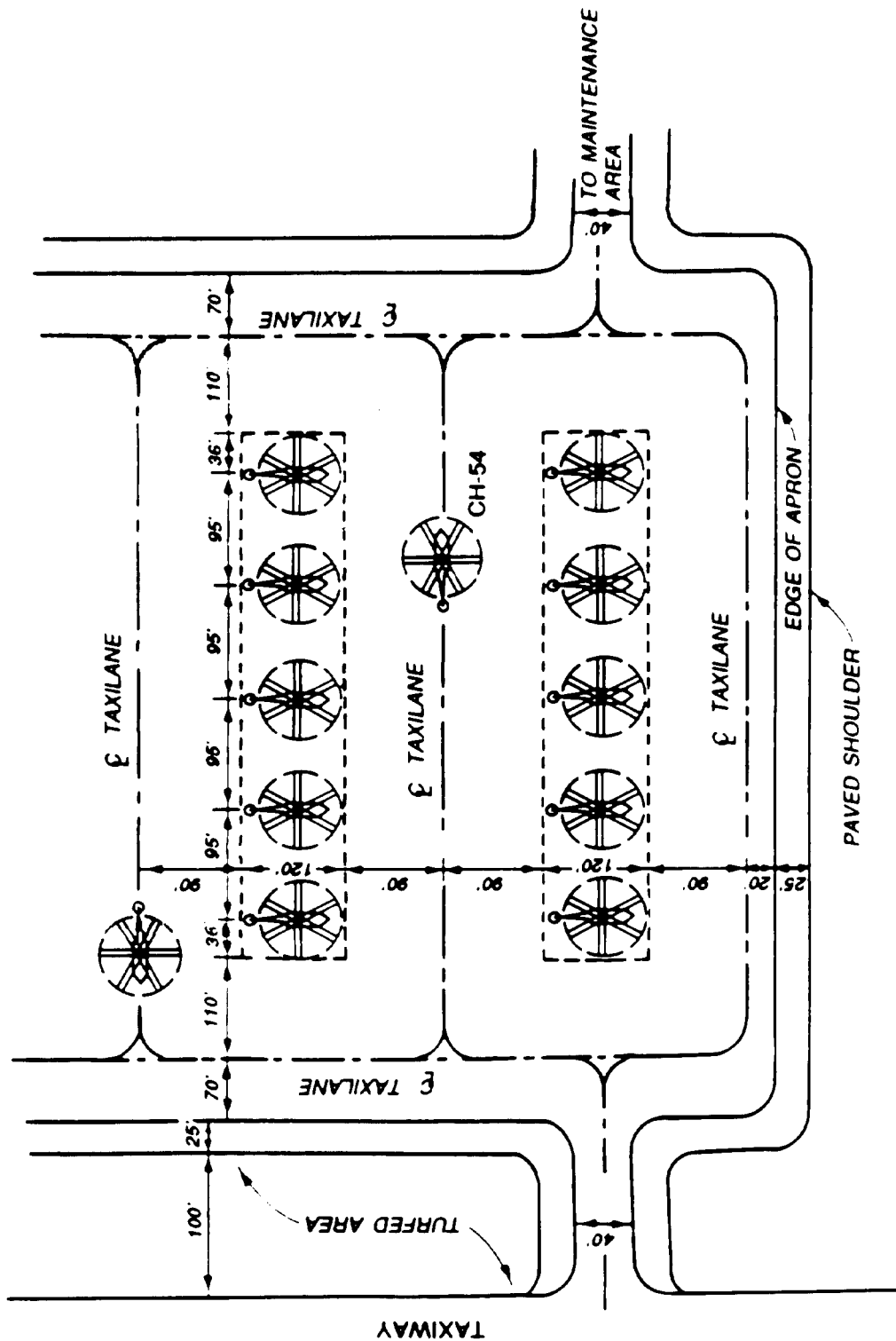


Figure B-10. CH-54 Parking Plan, Type 1 (Single Lane)

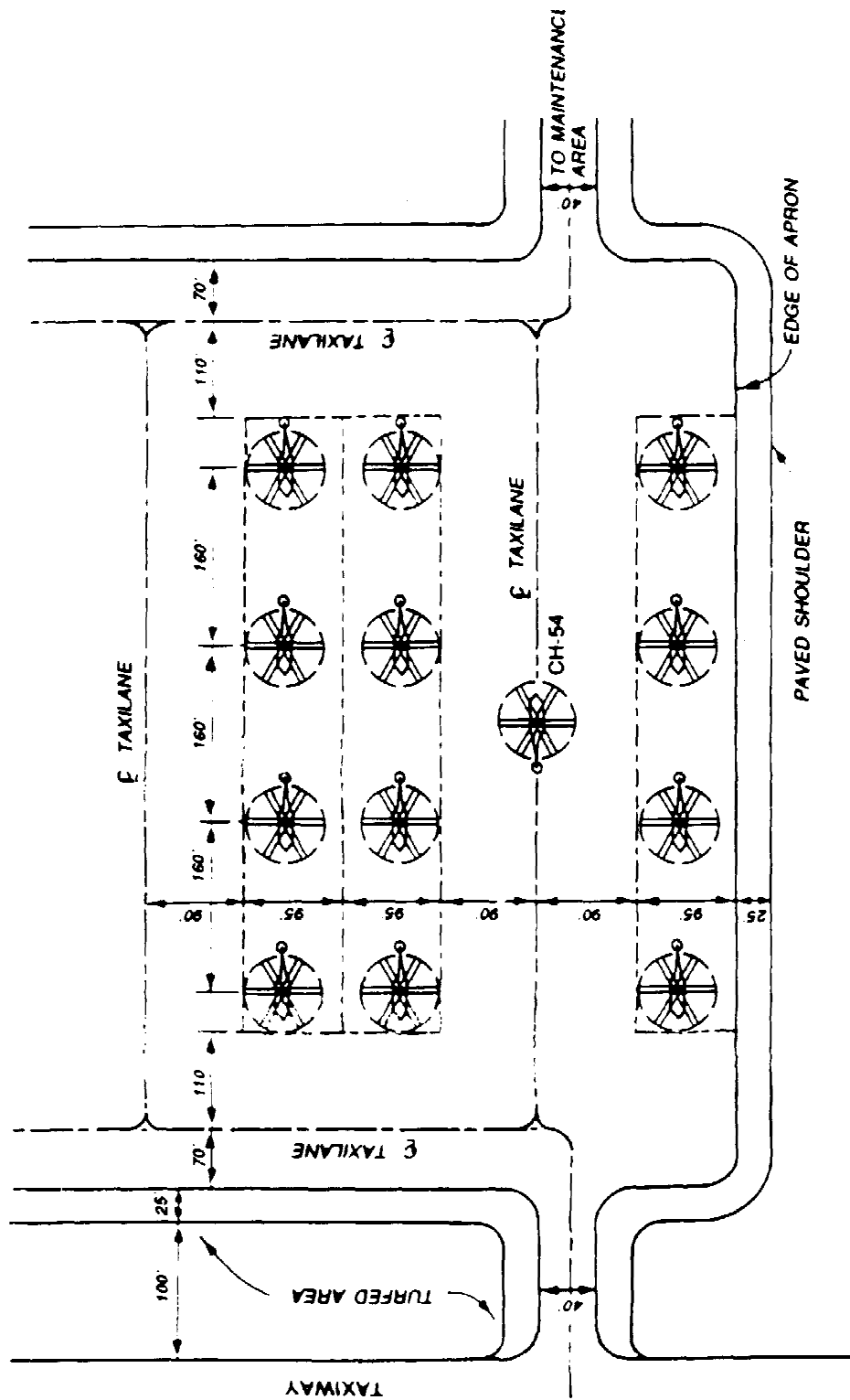


Figure B-11. CH-54 Parking Plan, Type 2 (Double Parallel)